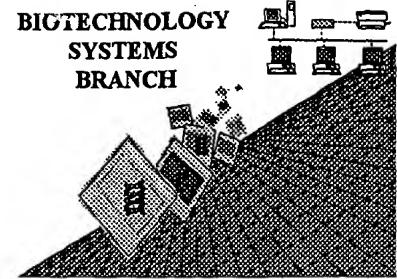


A. Mehta

## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09/180,798

Art Unit / Team No.: 1649

Date Processed by STIC: 1/13/2000

**THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.**

**PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,**
- 2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY**

**THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.**

**IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:**

**MARK SPENCER 703-308-4212**

## Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	<u>SERIAL NUMBER:</u> <u>09/180,298</u>
<b>ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE</b>		
1 <input type="checkbox"/> Wrapped Nucleics	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping".	
2 <input type="checkbox"/> Wrapped Aminos	The amino acid number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping".	
3 <input type="checkbox"/> Incorrect Line Length	The rules require that a line not exceed 72 characters in length. This includes spaces.	
4 <input type="checkbox"/> Misaligned Amino Acid Numbering	The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.	
5 <input type="checkbox"/> Non-ASCII	This file was not saved in ASCII (DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text so that it can be processed.	
6 <input type="checkbox"/> Variable Length	Sequence(s) <input type="checkbox"/> contain n's or Xaa's which represented more than one residue. As per the rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.	
7 <input type="checkbox"/> PatentIn ver. 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) <input type="checkbox"/> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence.	
8 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) <input type="checkbox"/> missing. If intentional, please use the following format for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS") (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: This sequence is intentionally skipped  Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).	
9 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) <input type="checkbox"/> missing. If intentional, please use the following format for each skipped sequence. <210> sequence id number <400> sequence id number 000	
10 <input checked="" type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Use of <220> to <223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
11 <input type="checkbox"/> Use of <213>Organism (NEW RULES)	Sequence(s) <input type="checkbox"/> are missing this mandatory field or its response.	
12 <input type="checkbox"/> Use of <220>Feature (NEW RULES)	Sequence(s) <input type="checkbox"/> are missing the <220>Feature and associated headings. Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown" Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)	
13 <input type="checkbox"/> PatentIn ver. 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other means to copy file to floppy disk.	

D. Mehta

1649

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/180,798

DATE: 01/13/2000  
TIME: 12:18:42

Input Set: I180798.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

Does Not Comply  
Corrected Diskette Needed

1 <110> APPLICANT: NOVARTIS AG  
2 <120> TITLE OF INVENTION: Improvements in or relating to organic compounds  
3 <130> FILE REFERENCE: Jen1  
4 <140> CURRENT APPLICATION NUMBER: US/09/180,798  
5 <141> CURRENT FILING DATE: 1998-11-16  
6 <160> NUMBER OF SEQ ID NOS: 33  
7 <170> SOFTWARE: PatentIn Ver. 2.1  
8 <210> SEQ ID NO 1  
9 <211> LENGTH: 6695  
10 <212> TYPE: DNA  
11 <213> ORGANISM: Daucus carota  
12 <220> FEATURE:  
13 <221> NAME/KEY: misc\_feature  
14 <222> LOCATION: (3696)..(6617)  
15 <223> OTHER INFORMATION: CDS  
16 <220> FEATURE:  
17 <221> NAME/KEY: intron  
18 <222> LOCATION: (3731)..(3802)  
19 <220> FEATURE:  
20 <221> NAME/KEY: intron  
21 <222> LOCATION: (3851)..(3979)  
22 <220> FEATURE:  
23 <221> NAME/KEY: intron  
24 <222> LOCATION: (4124)..(4211)  
25 <220> FEATURE:  
26 <221> NAME/KEY: intron  
27 <222> LOCATION: (4284)..(4357)  
28 <220> FEATURE:  
29 <221> NAME/KEY: intron  
30 <222> LOCATION: (4430)..(4528)  
31 <220> FEATURE:  
32 <221> NAME/KEY: intron  
33 <222> LOCATION: (4642)..(4757)  
34 <220> FEATURE:  
35 <221> NAME/KEY: intron  
36 <222> LOCATION: (4890)..(4967)  
37 <220> FEATURE:  
38 <221> NAME/KEY: intron  
39 <222> LOCATION: (5295)..(5803)  
40 <220> FEATURE:  
41 <221> NAME/KEY: intron  
42 <222> LOCATION: (6197)..(6339)  
43 <400> SEQUENCE: 1  
W--> 44 tctagatgac gaaatcgac taccttttatc ttngaaatac tagttttag tatcttgatt 60

All data is on Error Summary Sheet

Input Set: I180798.RAW

PAGE : 3

## RAW SEQUENCE LISTING

PATENT APPLICATION US/09/180,798

DATE: 01/13/2000

TIME: 12:18:42

Input Set: I180798.RAW

95 tgccatgtc acttaacctt gatcctcatg tcatcttgat tgcataagtc tactaaccga 3120  
96 gttgaacatg gtttatcatg tcttttggagg taacaatgtt gctttcacct ctgtccctga 3180  
97 tataggttt aggcttgcac cttccactag ccttgcgtt tttattcac agttcacaca 3240  
98 cctacttagca ctgttcacct ctgttgcgtt gtccgaaaat agtaagaagt ttcttcgca 3300  
99 taatagtggta tgatcattt agaaatagtg aatcaaatta tcgtgttatt gtgttgtac 3360  
100 tttggattt aatgagttgc tgaacattgt tgctgtttat cttgtcaag gcttgc当地 3420  
101 ggaaggcgat tagtaagagt gggcatccaa gcgc当地tgc当地 ctgtgggg cgccggcac 3480  
102 gtgtggatt ctgggtgtct attagaggac attatctata tatactgatt atttattt 3540  
103 atataaatca actactat tttctttgt aatgttata tagaaatccc actcgtaaac 3600  
104 ttgacaataa ccattgaaaat atttgc当地tgc当地 aattaattt tagtgc当地 tttaaattca 3660  
105 aactcattt attttacttt aaaaaataat tctatatgaa tcgtacagc ataaatataat 3720  
106 taaattacat gtatgtgtgc ctatataatgc ctgaatgtct aatagactcc aagacggctg 3780  
107 ctcttactgc ctaggcgtcc aggc当地tgc当地 ctgtgttgc ccttgc当地 tatggggctg 3840  
108 gtatgacatt gtggggatc cctatcactg gattccgtt ttgc当地tgc当地 tctgttcaat 3900  
109 tgatttcat tgatgttagt ttacttagtt tataatatt ctttatttgc当地 ataattt 3960  
110 tggagtttcaat gatgacagg gagcttaca gcaataacat aagtggacca attcctagtg 4020  
111 atcttggaa tctgacaataat ttgtgc当地tgc当地 tggacctata catgaatagc ttctctggac 4080  
112 ctataccgga cacatttagga aagcttacaa ggctacattt ctgtatgac tacaatctt 4140  
113 cactagttt taacttaatg caatttgatt atccttcaat gtgattgatt atatcacaat 4200  
114 ttactggata ggc当地tgc当地 caacaactgc ctctctggc caatttcaat gtcactgact 4260  
115 aatattacaa ctcttcaatg cttgttagt ttccgc当地tgc当地 tecagatagt ttgttgg 4320  
116 tgatgtttc aattttataat ctaaatatgt tcatacgggat ttatcaat 4380  
117 caggaccatg accggataat ggctcattt ctttgc当地tgc当地 acctatcagg ttaatgcta 4440  
118 gtaatatctt taatattatg gtcttactt ctactgc当地 agctatgata atatttttt 4500  
119 tctccttcat atattatcac ttgc当地tgc当地 ttggcaataat ttgaatttgc当地 tttggacctg 4560  
120 taacttggag gccc当地tgc当地 gcatctcccc cattttctcc accacccctg ttc当地tgc当地 4620  
121 catcaacatg acagccctca ggtgatttag tttttatattt aatttcccgta ataaatttta 4680  
122 tgactgtaaa aatttgggtt aatttcccgta gttgc当地tgc当地 aagtattttt cttcttctc 4740  
123 ttcttattat tatgaaggac aaaaatggc当地 cactggacatg attgcttgggat gagtagctg 4800  
124 tggctgtctt ttactgtttt ctgc当地tgc当地 aatggcattt gcatggtggc ggagaagaaa 4860  
125 acccgccgat catttcttgc当地 atgtgc当地 ttagtccctgt aaatagatat ctattgaa 4920  
126 gcttactgtc tttggactttt gtttgc当地tgc当地 tcatttagtta acctcagctg aaggaggacc 4980  
127 agaagtgc当地 cttggc当地tgc当地 tgaagaggtt ttctctgc当地 gaatttgc当地 tc当地tgc当地 5040  
128 tacttttagt accatcccttgc当地 gaagaggtt atttggtaatg tttgtataagg gacgc当地tgc当地 5100  
129 tgatggctca cttgttagcag tttaaaaggct taaagaagaa cgaacaccag gtggc当地tgc当地 5160  
130 gcaatgttcaat acagaagtgg aatatttttgc当地 catggc当地tgc当地 catcgaaatc ttctctgtct 5220  
131 acgtggtttgc当地 tgc当地tgc当地 ctaccggc当地 gcttcttgc当地 tatccatataca tggctaatgg 5280  
132 aagtggctg gcatgtttaa gaggtatctc agttacaattt accataactt gccagaatgtt 5340  
133 tggatttgc当地 aaaaatgaaat ataaactccct acactatgtt aaggtgtttt aatttctgat 5400  
134 cagatcttgc当地 ttcccttgc当地 aagataccatg ttatttttgc当地 attgataaccg 5460  
135 gtatatttgc当地 tttttgtat ttgggttat gcaaggattt cgagtctaat aagttatcaat 5520  
136 actggatgtctt atgtttatttgc当地 tgaatttgc当地 ttctctgtctt atgtgc当地 atatataatga 5580  
137 ttcaacttgg aatcatcttgc当地 taatataactg tgtaaaatgtc gctgttgc当地 ttcatcattt 5640  
138 attagcttgc当地 ataaatcaga atctgc当地tgc当地 tgagcttac cgacataactt taaacccttgc当地 5700  
139 ttatggccct gatatataatc gttccacttgc当地 ttatatttgc当地 ttgttgc当地 ctctgaattt 5760  
140 ttgtatgtat cattgtgtat tcttgc当地tgc当地 ataaatgttgc当地 gagcgtc当地 catcagaacc 5820  
141 tccccctgtat tggccacta gggagaggat tgc当地tgc当地 tcttcttaggg gc当地tgc当地 5880  
142 atgc当地tgc当地 cattgtgtat ccaaggattt cc当地tgc当地 gtaaaagctg caaatatattt 5940  
143 atggacgaa gaatttggagg ctgttgc当地 ttagtgc当地 ttagcttaggc tcatggat 6000  
144 caaqgatacc catgttacga ctqctgtat gggatcattt gggc当地tgc当地 ctccggat 6060

PAGE: 4

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/180,798**

 DATE: 01/13/2000  
 TIME: 12:18:42

Input Set: I180798.RAW

145 cctctcgact ggaaaagtcat cagagaagac cgatgtcttt ggttatggga taatgctcct 6120  
 146 agagctcatt actggacaga gggctttga tcttgctgc cttgcgaacg atgatgtatgt 6180  
 147 tatgttgtt gattgggtat gtgtccccc tgcccttgc ttatccctt gcctgtatgtt gattcttagt 6240  
 148 gtgcctacta ctttgggtgt gccccttgc ttatccctt gcctgtatgtt gattcttagt 6300  
 149 catgttatgc atattgacct gcttgcataat gtcttttagg taaaaggct tttgaaagag 6360  
 150 aaaaagttgg agatgctggt cgatcctgac ctgcagaaca attacattga cacagaagtt 6420  
 151 gagcagctta ttcaagtagc attactctgt acccagggtt cgccaatggc gcggcctaag 6480  
 152 atgtcagagg tagtccgaat gcttgaaggt gatggcctt cagaaaagtgg ggacgagtgg 6540  
 153 caaaaagttg aagtcatcca tcaagacgta gaattagctc cacatcgAAC ttctgaatgg 6600  
 154 atccttagact cgacagataa cttgcattgtc ttgaaattat ctggccaag ataaacagca 6660  
 155 tataaaatgt aatgaaatatta atattttta tgggtt 6695

<210> SEQ ID NO 2  
 <211> LENGTH: 1815  
 <212> TYPE: DNA  
 <213> ORGANISM: Daucus carota  
 <220> FEATURE:  
 <221> NAME/KEY: CDS  
 <222> LOCATION: (94)..(1752)  
 <400> SEQUENCE: 2

gacaaaataacc	attgaaaatattt	ttgaaacctaa	ttaatttagta	gtgtcaggtt	taaattcaaa	60										
ctcatttaat	tttactttaa	aaaataattc	tat	atg	aat	cgt	aac	agt	ata	aat	114					
						Met	Asn	Arg	Asn	Ser	Ile	Asn				
						1					5					
ata	tta	aat	tac	atg	cag	ttc	act	gat	gct	tac	ctt	gac	aaa	tat	ggg	162
Ile	Leu	Asn	Tyr	Met	Gln	Phe	Thr	Asp	Ala	Tyr	Leu	Asp	Lys	Tyr	Gly	
10							15						20			
gtt	ctt	atg	aca	ttg	gag	ctt	tac	agc	aat	aac	ata	agt	gga	cca	att	210
Val	Leu	Met	Thr	Leu	Glu	Leu	Tyr	Ser	Asn	Asn	Ile	Ser	Gly	Pro	Ile	
25							30						35			
cct	agt	gat	ctt	ggg	aat	ctg	aca	aat	ttg	gtg	agc	ttg	gac	cta	tac	258
Pro	Ser	Asp	Leu	Gly	Asn	Leu	Thr	Asn	Leu	Val	Ser	Leu	Asp	Leu	Tyr	
40							45						50			55
atg	aat	agc	ttc	tct	gga	cct	ata	ccg	gac	aca	tta	gga	aag	ctt	aca	306
Met	Asn	Ser	Phe	Ser	Gly	Pro	Ile	Pro	Asp	Thr	Leu	Gly	Lys	Leu	Thr	
60							65						70			
agg	cta	aga	ttc	ttg	cgt	ctc	aac	aac	agc	ctc	tct	ggt	cca	att	354	
Arg	Leu	Arg	Phe	Leu	Arg	Leu	Asn	Asn	Ser	Leu	Ser	Gly	Pro	Ile		
75							80						85			
cca	atg	tca	ctg	act	aat	att	aca	act	ctt	caa	gtc	ctg	gat	tta	tca	402
Pro	Met	Ser	Leu	Thr	Asn	Ile	Thr	Leu	Gln	Val	Leu	Asp	Leu	Ser		
90							95						100			
aac	aat	cggtt	ctat	ggat	ccgtt	aat	ggc	tca	ttt	tct	ttg					450
Asn	Asn	Arg	Leu	Ser	Gly	Pro	Val	Pro	Asp	Asn	Gly	Ser	Phe	Ser	Leu	
105							110						115			
ttt	aca	cct	atc	agt	ttt	gcc	aat	aat	ttg	aat	tta	tgt	gga	ccc	gtt	498
Phe	Thr	Pro	Ile	Ser	Phe	Ala	Asn	Asn	Leu	Asn	Leu	Cys	Gly	Pro	Val	
120							125						130			135
act	ggg	agg	ccc	tgc	cct	gga	tct	ccc	cca	ttt	tcg	cca	cca	cct	ccg	546
Thr	Gly	Arg	Pro	Cys	Pro	Gly	Ser	Pro	Pro	Phe	Ser	Pro	Pro	Pro	Pro	
140							145						150			

PAGE: 5

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/180,798DATE: 01/13/2000  
TIME: 12:18:42

Input Set: I180798.RAW

195	ttc atc cca cca tca aca gta cag cct cca gga caa aat ggt ccc act	594
196	Phe Ile Pro Pro Ser Thr Val Gln Pro Pro Gly Gln Asn Gly Pro Thr	
197	155 160 165	
198	gga gct att gct ggg gga gta gct gct ggt gct tta ctg ttt gct	642
199	Gly Ala Ile Ala Gly Gly Val Ala Ala Gly Ala Ala Leu Leu Phe Ala	
200	170 175 180	
201	gca cct gca atg gca ttt gca tgg tgg cgg aga aga aaa ccg cga gaa	690
202	Ala Pro Ala Met Ala Phe Ala Trp Trp Arg Arg Arg Lys Pro Arg Glu	
203	185 190 195	
204	cat ttc ttt gat gtg cca gct gaa gag gac cca gaa gtg cac ctt ggt	738
205	His Phe Phe Asp Val Pro Ala Glu Glu Asp Pro Glu Val His Leu Gly	
206	200 205 210 215	
207	caa ctg aag agg ttt tct ctg cga gaa ttg caa gtc gca acg gat act	786
208	Gln Leu Lys Arg Phe Ser Leu Arg Glu Leu Gln Val Ala Thr Asp Thr	
209	220 225 230	
210	ttt agt acc ata ctt gga aga ggt gga ttt ggt aag gtg tat aag gga	834
211	Phe Ser Thr Ile Leu Gly Arg Gly Phe Gly Lys Val Tyr Lys Gly	
212	235 240 245	
213	cgc ctt gct gat ggc tca ctt gta gca gtt aaa agg ctt aaa gaa gaa	882
214	Arg Leu Ala Asp Gly Ser Leu Val Ala Val Lys Arg Leu Lys Glu Glu	
215	250 255 260	
216	cga aca cca ggt ggt gag ctg cag ttt caa aca gag gtg gaa atg att	930
217	Arg Thr Pro Gly Gly Glu Leu Gln Phe Gln Thr Glu Val Glu Met Ile	
218	265 270 275	
219	agc atg gct gtg cat cga aat ctt ctg cgt cta cgt ggt ttc tgc atg	978
220	Ser Met Ala Val His Arg Asn Leu Leu Arg Leu Arg Gly Phe Cys Met	
221	280 285 290 295	
222	aca cca aca gag cgg ctt ctt gta tat cca tac atg gct aat gga agt	1026
223	Thr Pro Thr Glu Arg Leu Leu Val Tyr Pro Tyr Met Ala Asn Gly Ser	
224	300 305 310	
225	gtt gcg tcg tgt tta aga gag cgt cag cca tca gaa cct ccc ctt gat	1074
226	Val Ala Ser Cys Leu Arg Glu Arg Gln Pro Ser Glu Pro Pro Leu Asp	
227	315 320 325	
228	tgg cca act agg aag agg att gca cta gga tct gct agg ggg ctt tct	1122
229	Trp Pro Thr Arg Lys Arg Ile Ala Leu Gly Ser Ala Arg Gly Leu Ser	
230	330 335 340	
231	tat ttg cat gac cat tgt gat ccc aag att atc cat cgt gat gta aaa	1170
232	Tyr Leu His Asp His Cys Asp Pro Lys Ile Ile His Arg Asp Val Lys	
233	345 350 355	
234	gct gca aat ata tta ttg gac gaa gaa ttt gag gct gtt gta ggt gat	1218
235	Ala Ala Asn Ile Leu Leu Asp Glu Glu Phe Glu Ala Val Val Gly Asp	
236	360 365 370 375	
237	ttt ggg tta gct agg ctc atg gat tac aag gat acc cat gtt aca act	1266
238	Phe Gly Leu Ala Arg Leu Met Asp Tyr Lys Asp Thr His Val Thr Thr	
239	380 385 390	
240	gct gta agg ggt acc ttg ggc tac ata gct ccc gag tac ctc tcg act	1314
241	Ala Val Arg Gly Thr Leu Gly Tyr Ile Ala Pro Glu Tyr Leu Ser Thr	
242	395 400 405	
243	gga aag tca tca gag aag acc gat gtc ttt ggt tat ggg att atg ctc	1362
244	Gly Lys Ser Ser Glu Lys Thr Asp Val Phe Gly Tyr Ile Met Leu	

PAGE: 6

**VERIFICATION SUMMARY**  
**PATENT APPLICATION US/09/180,798**

DATE: 01/13/2000  
TIME: 12:18:42

Input Set: I180798.RAW

Line ? Error/Warning

Original Text

44 W "N" or "Xaa" used: Feature required  
55 W "N" or "Xaa" used: Feature required  
76 W "N" or "Xaa" used: Feature required  
272 W Invalid/Missing Amino Acid Numbering

tctagatgac gaaatcgcc tacctttgat ttngaaat  
acctgnggac aaaagaagcg ctgatgaact gatttaat  
agtcacatna taaaattggn gggttggaca aatataac